Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

1-76. (Canceled)

77. (New) A method of making an integrated circuit comprising:

forming on a substrate circuitry including a plurality of integrated circuits having active device; and

forming an elastic dielectric layer adjacent the circuitry;

wherein the integrated circuit is able to have a major portion of the substrate removed throughout a full extent thereof while retaining its structural integrity.

78. (New) The method of claim 77, wherein the integrated circuit is able to be thinned to about 50 microns or less while retaining its structural integrity.

79. (New) The method of claim 77 further comprising forming the elastic dielectric layer by deposition of one or more stress-controlled dielectric films.

80. (New) The method of claim 79, wherein the one or more stress-controlled dielectric films are caused to have a stress of about 8×10^8 dynes/cm^2 or less.

81. (New) The method of claim 80, wherein the stress is tensile.

82. (New) The method of claim 79 further comprising depositing at least one of the stress-controlled dielectric films using multiple RF energy sources.

83. (New) The method of claim 77, wherein the substrate is a semiconductor wafer.

84. (New) The method of claim 77 further comprising removing a major portion of the substrate.

85. (New) The method of claim 84, wherein the integrated circuit is caused to be substantially flexible.

86. (New) The method of claim 84, wherein the major portion of the substrate is removed prior to forming the circuitry.

87. (New) The method of claim 84, wherein the major portion of the substrate is removed after forming the circuitry.

88. (New) The method of claim 77 wherein the integrated circuit is caused to have a thickness of about 50 microns or less.

89. (New) The method of claim 88 wherein the integrated circuit is caused to be substantially flexible.

90. (New) The method of claim 77, wherein the elastic dielectric layer is caused to have a stress of about 8×10^8 dynes/cm^2 or less.

91. (New) The method of claim 90, wherein the stress is tensile.

92. (New) The method of claim 77, wherein the elastic dielectric layer is formed from at least one of an inorganic dielectric material and an organic dielectric material.

93. (New) The method of claim 92, wherein the inorganic dielectric material is one of silicon dioxide and silicon nitride.

94. (New) A method of making an integrated circuit, comprising:

forming on a substrate circuitry including a plurality of integrated circuits having active devices;

forming an elastic dielectric layer adjacent the circuitry; and

removing a major portion of the substrate throughout a full extent thereof without impairing the structural integrity of the integrated circuit.

95. (New) The method of claim 94, wherein the integrated circuit is caused to be substantially flexible.

96. (New) The method of claim 94, wherein the major portion of the substrate is removed prior to forming the circuitry.

97. (New) The method of claim 94, wherein the major portion of the substrate is removed after forming the circuitry.

98. (New) The method of claim 94, further comprising forming the elastic dielectric layer by deposition of one or more stress-controlled dielectric films.

99. (New) The method of claim 98, wherein the one or more stress-controlled dielectric films are caused to have a stress of about 8×10^8 dynes/cm^2 or less.

100. (New) The method of claim 99, wherein the stress is tensile.

101. (New) The method of claim 99 further comprising depositing at least one of the stress-controlled dielectric films using multiple RF energy sources.

102. (New) The method of claim 94, wherein the substrate is a semiconductor wafer.

103. (New) The method of claim 94, wherein the integrated circuit is caused to have a thickness of about 50 microns or less.

104. (New) The method of claim 103, wherein the integrated circuit is caused to be substantially flexible.

105. (New) The method of claim 94, wherein the elastic dielectric layer is caused to have a stress of about 8×10^8 dynes/cm^2 or less.

106. (New) The method of claim 105, wherein the stress is tensile.

107. (New) The method of claim 94, wherein the elastic dielectric layer is formed from at least one of an inorganic dielectric material and an organic dielectric material.

108. (New) The method of claim 107, wherein the inorganic dielectric material is one of silicon dioxide and silicon nitride.

109. (New) A method of making an integrated circuit comprising:

forming a thin substrate; and

forming on the substrate circuitry including a plurality of integrated circuits having active devices;

wherein the integrated circuit is substantially flexible while retaining its structural integrity.

110. (New) The method of claim 109, wherein the thin substrate is formed prior to forming said circuitry.

111. (New) The method of claim 109, wherein the thin substrate is formed after forming said circuitry.

112. (New) The method of claim 109 further comprising forming a elastic dielectric layer adjacent said circuitry.

113. (New) The method of claim 112, further comprising forming the elastic dielectric layer by deposition of one or more stress-controlled dielectric films.

114. (New) The method of claim 113, further comprising depositing at least one of the stress-controlled dielectric films using multiple RF energy sources.

115. (New) The method of claim 112, wherein the elastic dielectric layer is caused to have a stress of about 8×10^8 dynes/cm^2 or less.

116. (New) The method of claim 115, wherein the stress is tensile stress.

117. (New) The method of claim 112, wherein the stress-controlled dielectric layer is formed from at least one of an inorganic and an organic dielectric material.

118. (New) The method of claim 117, wherein the inorganic dielectric material is one of silicon dioxide and silicon nitride.

119. (New) The method of claim 109, wherein said substrate is a semiconductor wafer.

120. (New) The method of claim 109, wherein said substrate is a dielectric.

121. (New) The method of claim 109, wherein the integrated circuit is caused to have a thickness of about 50 microns or less.

122. (New) A method of making an integrated circuit comprising:

forming a thin substrate;

forming on the substrate circuitry including a plurality of integrated circuits having active devices; and

wherein the integrated circuit is elastic while retaining its structural integrity.

123. (New) The method of claim 122, wherein the thin substrate is formed prior to forming said circuitry.

124. (New) The method of claim 122, wherein the thin substrate is formed after forming said circuitry.

125. (New) The method of claim 122 further comprising forming a elastic dielectric layer adjacent said circuitry.

126. (New) The method of claim 125, further comprising forming the elastic dielectric layer by deposition of one or more stress-controlled dielectric films.

127. (New) The method of claim 126, further comprising depositing at least one of the stress-controlled dielectric films using multiple RF energy sources.

128. (New) The method of claim 125, wherein the elastic dielectric layer is caused to have a stress of about 8×10^8 dynes/cm^2 or less.

129. (New) The method of claim 128, wherein the stress is tensile stress.

130. (New) The method of claim 125, wherein the stress-controlled dielectric layer is formed from at least one of an inorganic and an organic dielectric material.

131. (New) The method of claim 130, wherein the inorganic dielectric material is one of silicon dioxide and silicon nitride.

132. (New) The method of claim 122, wherein said substrate is a semiconductor wafer.

133. (New) The method of claim 122, wherein said substrate is a dielectric.

134. (New) The method of claim 122, wherein the integrated circuit is caused to have a thickness of about 50 microns or less.

135. (New) A method of making an integrated circuit comprising:

forming a thin substrate; and

forming on the substrate circuitry including a plurality of integrated circuits having active devices;

wherein the integrated circuit is substantially flexible and elastic while retaining its structural integrity.

136. (New) The method of claim 135, wherein the thin substrate is formed prior to forming said circuitry.

137. (New) The method of claim 135, wherein the thin substrate is formed after forming said circuitry.

138. (New) The method of claim 135 further comprising forming a elastic dielectric layer adjacent said circuitry.

139. (New) The method of claim 138, further comprising forming the elastic dielectric layer by deposition of one or more stress-controlled dielectric films.

140. (New) The method of claim 139, further comprising depositing at least one of the stress-controlled dielectric films using multiple RF energy sources.

141. (New) The method of claim 138, wherein the elastic dielectric layer is caused to have a stress of about 8×10^8 dynes/cm^2 or less.

142. (New) The method of claim 141, wherein the stress is tensile stress.

143. (New) The method of claim 138, wherein the stress-controlled dielectric layer is formed from at least one of an inorganic and an organic dielectric material.

144. (New) The method of claim 143, wherein the inorganic dielectric material is one of silicon dioxide and silicon nitride.

145. (New) The method of claim 135, wherein said substrate is a semiconductor wafer.

146. (New) The method of claim 135, wherein said substrate is a dielectric.

147. (New) The method of claim 135, wherein the integrated circuit is caused to have a thickness of about 50 microns or less.